

State of New Hampshire Department of Safety Department of Environmental Services

New Hampshire OBD and Safety Testing Program

Frequently Asked Questions for Motorists

The following information is provided to answer questions about the new vehicle OBD and Safety Testing program. For additional information, please contact Becky Ohler at the New Hampshire Department of Environmental Services, 271-6749 or robler@des.state.nh.us.

1. What is OBD?

Automobiles manufactured since the early 1980s are equipped with "smart" systems, known as on-board diagnostics (OBD). These systems were developed to help repair technicians identify problems associated with the computerized engine systems of modern vehicles.

As a result of the federal Clean Air Act Amendments of 1990, all 1996 and newer cars and light trucks have a powerful computer that uses second generation OBD technology to monitor conditions and components that are specifically related to vehicle emissions. The computer not only does a good job of making sure the engine runs at peak efficiency, but it also will alert the consumer of any malfunctioning emissions control components that require attention. When the OBD system detects a problem with the emission control system, a "check engine" or "service engine soon" light is illuminated on the dashboard. The system helps alert the motorist of malfunctions in the vehicle. Often early detection and repair of minor malfunctions can help avoid more extensive and expensive repairs.

2. How is the new OBD and Safety Testing inspection program different?

Since 1998 the State's annual vehicle inspection has included, in addition to all the safety checks, a visual check for presence and proper connection of five primary emissions related components. New Hampshire's new vehicle safety and emissions inspection program – called the New Hampshire OBD and Safety Testing Program (NHOST) – has two new features. First, the reporting system is becoming fully automated. Second, the visual emissions inspection is being replaced with OBD testing for 1996 and newer light duty vehicles. The safety portion of the inspection for all vehicles is still the same and pre-1996 non-OBD equipped vehicles will still have the visual check of emission control components.

Newer cars are designed to have much lower emissions than older vehicles and the OBD system is designed to keep the vehicles running cleanly. The OBD system, however, is only effective if it is functioning properly, and the motorist pays attention to the warning signs by having their vehicle serviced when necessary. The new OBD inspection is designed to ensure the warning signs are heeded.

3. What are the advantages of the new inspection program?

The NHOST program is an important and cost-effective way to help protect the health and safety of New Hampshire's citizens. Motor vehicles are the primary source of air pollution generated in the State, and the OBD inspection program will help reduce motor vehicle emissions. New Hampshire's OBD program is also a less expensive, less time consuming, more customer friendly alternative to the federally required tailpipe testing program. Additionally, since the OBD test is fully automated and both the OBD and safety inspection information is reported electronically to the New Hampshire Division of Motor Vehicles (NHDMV), the need for any costly manual data entry is eliminated.

The switch to a fully electronic reporting system has many other benefits, including: 1) improved accuracy of inspection data information provided to consumers; 2) more effective and timely communication between inspection stations and the NHDMV, thereby providing for more timely removal of unsafe vehicles from the roadways; 3) elimination of costly and time consuming paperwork; 4) reduction of fraud (e.g., "sticker shopping"); 5) better measurement of the effectiveness of the program; and 6) more efficient and effective enforcement.

Utilizing the OBD system for inspecting vehicle emission control components provides the consumer with 1) a list of diagnostic trouble codes that indicate components that are in need of repair, 2) an early vehicle maintenance opportunity, which leads to greater fuel efficiency, reliability, cost savings, and reduced air pollution, and 3) a better alternative to tailpipe testing.

4. How much more will the inspection cost?

Based on fair market value, the cost to the consumer should only increase \$10 to \$15 per inspection. New Hampshire does not set the cost a station can charge for an inspection. The new inspection system will add additional costs to the stations for overall program management, lease of the new equipment, and possibly a phone line or internet connection. The OBD test may add a little time to the inspection (less than five minutes), but the electronic data collection and reporting will help offset this additional time.

It should be noted that the stations will not be charged for lease of the new equipment until the new program officially begins statewide, probably during 2005.

5. What happens if my vehicle is rejected (i.e., fails the inspection)?

As in the past, if your vehicle is rejected for any portion of the safety inspection, you will not receive an inspection sticker. The vehicle must be repaired and re-inspected by the tenth of the month following the inspection month.

Until the program is fully implemented statewide, if your vehicle passes the safety inspection but is rejected for the OBD test, you will receive a sticker and be notified of the OBD rejection. You will also receive a test report that specifies the reason for the rejection. After the program is fully implemented statewide, if your vehicle is rejected for the OBD test, you will be given a partial inspection sticker consisting of the numbers that indicate the date of the inspection. You will not receive the colored background to that sticker. You will have 60 days to have your vehicle repaired and re-tested. Generally, after repairs, you will need to do some routine driving

before re-testing your vehicle to allow the OBD system to re-calibrate itself. Consult your repair technician to determine how long this may take.

6. What are the chances of my vehicle being rejected for (failing) the OBD portion of the inspection?

Average failure rates for existing OBD programs are about 5% for the older vehicles (1996 and 1997) and 1 to 2 % for newer vehicles.

7. Will it cost anything to have my vehicle re-tested after making the necessary OBD repairs?

The State does not set the cost for vehicle inspections, so different stations may have different policies on re-tests. However, the State does not charge inspection stations for the first OBD retest as long as the vehicle is repaired and re-tested within the 60 day grace period. Please note that inspection stations are charged an additional fee for retesting vehicles that are rejected due to safety issues.

8. If my "check engine" or "service engine soon" light is NOT on, will I pass the OBD test?

If your check engine light is not on, you will pass the test unless:

- 1) Your "check engine" light bulb is not working properly (e.g., it is burned out). To find out if your bulb is working properly, check to make sure it goes on when the key is turned on and the engine is NOT running. It should go off after the engine is turned on and running.
- 2) Certain components are deemed "not ready" for testing. In this case, the vehicle owner may be asked to drive around under a variety of conditions to complete a readiness "drive cycle," then return for testing. A vehicle may not be "ready" for a number of reasons, including a recently dead, replaced, or disconnected battery or recent repairs to OBD related components.
- 3) The Data Link Connector (DLC) that allows the OBD scan tool to connect to the vehicle is damaged or missing.

9. If my vehicle is rejected for the OBD test, who should do the OBD repairs?

Regardless of whether a failure is identified by an OBD test or whether the check engine light comes on mid-year, only qualified, trained technicians equipped with the correct diagnostic and repair equipment should perform OBD related service. Ask your repair shop if they employ trained OBD technicians and have access to the necessary equipment to properly service 1996 and newer vehicles.

As with any vehicle repair cost, OBD related costs may vary significantly, depending on the nature of the system or component requiring repair.

10. Will repair costs be covered by warranty?

Warranty coverage varies depending on components and individual manufacturer warranty provisions. In most cases, however, responding sooner rather than later is likely to minimize the individual owner's repair liability. The federal Clean Air Act requires an 8-year or 80,000 mile warranty on the major emissions control components such as the catalytic converter, and a 2-year or 24,000 mile warranty on other emissions control components.

11. Is there a limit on how much I have to spend to pass the OBD test?

Currently, New Hampshire has not allowed for spending limits or repair waivers in its program. Legislation is being considered during the 2005 legislative session that would establish waiver limits. More information will be provided on this issue as it becomes available.

12. Can the OBD system record information about me and the way I drive?

No. The OBD system may, in some cases, utilize a "freeze frame" capability to record certain engine conditions at the time a problem is detected. For example, if your engine misfires, the OBD system will record the speed and RPMs at which the misfire occurred in order to assist the repair technician in diagnosing the root cause of the problem. The OBD system will not record routine driving information and no personal information is collected or reported through the electronic system.

13. Who do I contact for help about the new inspection program?

For any assistance or inquiries related to the new inspection program, contact the NHOST Services Help Line at 1-800-383-4124, the N.H. Division of Motor Vehicles at 603-271-8800, or visit the NHOST website at www.nhinspect.com.